

INSTALLATION & USER GUIDE FOOD COOLING CABINETS

1. General

upon receipt of the refrigeration equipment, remove all external and internal packaging. Carefully inspect the unit for evidence of transit damage or short shipment and inform the manufacturers or distribution company immediately in writing, quoting machine serial number. Claims for faulty goods may not be subsequently considered if the above is ignored.

If the unit is a replacement for an existing machine please remember that if it is the intention to scrap the redundant item there is a legislative requirement to ensure that all cfc refrigerants are reclaimed and disposed of in a proper manner. We would be pleased to offer advice on this.

2. SITING

Each unit is equipped with a complement of shelf supports, shelf slides and shelves as detailed in the product specification. These items should be installed prior to use.

Ensure that the cabinet is sited on a level surface to enable correct drainage of condensate water from within the unit and allow self closing mechanism on door assemblies to function. In the case of models fitted with castors, sited on an uneven floor it may be necessary to fit adjustable legs to the equipment in order to make sure it is level. These are available from the manufacture. Siting of the equipment is important if correct operation is to be achieved. Whilst the equipment is designed to work in high ambient temperatures, adequate ventilation must be provided in order to allow heat removal. Do not site refrigerators next to cooking equipment or within a continually bright sunlit position. If the machine has laid flat during the installation process, allow to stand upright for a minimum period of 4 hours before the equipment is switched on at the mains power supply. Machines supplied with castors incorporate a braking mechanism. When the machine is sited in the chosen location apply the brake by activating the lever with your foot.

3. USER INSTRUCTIONS

Here are some general guides which will help to ensure trouble free operation of the equipment;

Do not: put hot or steaming food into the equipment.

Do not: overload the cabinet.
Do not: block air flow ducts.

Do not: leave cabinet doors open for longer than necessary.

Do not: use sharp instruments for removing ice/food residue.

4. INSTALLATION

When the above factors have been completed the machine may be connected to a 13 amp 230 volt earthed socket, which should be accessible for isolation of the equipment.

It is recommended that the equipment is protected by an RCCB installed to current IEE regulations. If in any doubt consult a qualified electrician.

All products are subject to an electrical safety test (PAT) during manufacture. There is a test certificate fixed to the rear of each machine. Upon switching on, a green indicator will illuminate in the control panel indicating power on. The temperature display will also illuminate, it will indicate the internal air temperature of the cabinet. There is a built in time delay of approximately 2 minutes before the compressor starts. When cooling action commences the display will indicate a gradual fall in the internal temperature until the machines reaches the correct operating condition. The machine should be allowed to cool to the specified temperature without door openings during this period. Only when the machine is at the correct temperature, should food which is itself at, or close to the correct storage temperature, be introduced into the unit.

5. <u>USER MAINTENANCE</u>

Switch off and unplug during maintenance operations. Do not perform cleaning operations with food/consumables in the unit.

Do not attempt to remove any protective covers.

Warm soapy water is suitable cleaning solution for both internal and external finishes. Occasionally apply a proprietary stainless polish to the external stainless steel surfaces.

Do not use abrasive cleaning materials or those containing bleach as these can effect the surface appearance of the machine.

During cleaning operations check the condition of the door seal as it can be damaged through use and ineffective. If signs of damage are evident , replace the seal by pulling it out of the retaining section in the door and simply push replacement seal into place. Ensure grilles and condenser fins remain unobstructed and free from particles at all times. A stiff brush or preferably a vacuum cleaner can be used. **Remember to switch on machine after cleaning operation is complete.**

Power consumption for Food Cooling Products

MODEL	1 HOUR CONSUMPSIO N	24 HOURS CONSUMPSIO N	364 DAYS CONSUMPSIO N	STANDBY CONSUMPTIO N
T450L	0.55kWh	4.4 kWh	1602 kWh	0.031kWh
B450L				
W16L				
T450H	0.5 kWh	4.0 kWh	1446 kWh	0.031kWh
B450H				
W16H				
T600L	0.7 kWh	5.6 kWh	2038 kWh	0.031kWh
B600L				
W21L				
T600H	0.5 kWh	4.0 kWh	1446 kWh	0.031kWh
B600H				
W21H				
T900L	0.7 kWh	5.6 kWh	2038 kWh	0.058Wh
B900L	0 (5 1)4//	5 01 14 11	4000 114/	0.0501.14/1
T900H	0.65 kWh	5.2kWh	1893 kWh	0.058kWh
B900H	0.5.1.34/1-	4.01.14/1-	4.4.7.1.3.4/1-	0.010134/1-
S140L	0.5 kWh	4.0kWh	1446 kWh	0.019kWh
S140H	0.3 kWh	2.4 kWh	874 kWh	0.019kWh
SS1L	0.45 kWh	3.6 kWh	1310 kWh	0.019kWh
WS1L SS1H	0.285 kWh	2.28kWh	830 kWh	0.019kWh
WS1H	U.203 KVVII	Z.ZOKVVII	OSU KWIII	0.019KVVII
SS2L	0.5 kWh	4.0 kWh	1446 kWh	0.038kWh
WS2L	U.5 KVVII	4.0 KVVII	1440 KVVII	U.USOKWII
SS2H	0.35 kWh	2.8 kWh	1019 kWh	0.038kWh
WS2H				
1D1L (WC1)	0.5 kWh	4.0 kWh	1446 kWh	0.031kWh
1D1H (WC1)	0.36 kWh	2.88 kWh	1048 kWh	0.031kWh
1D2L (WC1)	0.55 kWh	4.4 kWh	1602 kWh	0.031kWh
1D2H (WC1)	0.36 kWh	2.88 kWh	1048 kWh	0.031kWh
1D3L (WC1)	0.55 kWh	4.4 kWh	1602 kWh	0.031kWh
1D3H (WC1)	0.5 kWh	4.0 kWh	1446 kWh	0.031kWh
COLDROOM	0.690 kWh	5.52 kWh	2009 kWh	0.092kWh
FREEZER				
COLDROOM	0.745 kWh	11.64 kWh	4237 kWh	0.105kWh
CHILLER				



6. INSTRUMENTATION AND DISPLAY

All our refrigeration units offer fully automatic operation and there is no requirement to adjust any of the controls. Should the machine continually operate at a different temperature to that which is indicated on the control panel, contact the manufacturer or service agent.

The machine will defrost at regular intervals. This is accompanied by a df readout.

The controller is a mains powered combined thermometer and thermostat and is microprocessor based (display is in degrees C). As well as temperature readings the display will also exhibit various messages designed to inform the user of the status of the machine or alarm messages as follows:

Df = cabinet is in defrost mode.

Df and temperature flashing = recovering from defrost.

All and flashing temperature display = cabinet is in high temperature alarm.*

pF and flashing 40 = sensor probe failure.**

- * Check all doors are closed. Wait 30 mins, if cabinet has not returned to the correct operating temperature contact supplier. After the displayed temperature has returned to the normal AL message may still flash, this is normal and the controller will reset at the next defrost period.
- ** Call supplier.

7. LOADING GUIDELINES

Ensure that the unit is large enough for your everyday storage requirements plus any extra load during peak periods of activity. Do not be tempted to overload the units as this will only serve to reduce the air flow within the storage area and thereby cause temperature stratification of the product within.

Where load line indicators are fitted ensure that food storage levels do not exceed the indicated mark.

Ideally raw and cooked foods should be kept in separate refrigerators. Where this is not possible always store cooked food above raw food. Food should be covered or held in appropriate containers, preferably with clear lids in order to avoid unnecessary handling in identification. Never put hot food into the refrigerator. This can cause severe rises in the temperature of other products in the unit and cause condensation or ice build up.

Cooked foods can be left to cool for up to 1 ½ hours before refrigerating. If this is insufficient it may be necessary to portion the product in order to accelerate the process.

8. SERVICE INFORMATION (Faults/repairs)

There are no user serviceable items inside the equipment.

Maintenance and repairs must only be carried out by a properly qualified and trained person.

In the event of a component failure, SWITCH OFF AND UNPLUG the unit.

Access to:-

- -The compressor and electronic controller can be made via the unit compartment.
- -The controller set up instructions are inside the electrical box.

9. SPARE PARTS IDENTIFICATION

Each machine is manufactured to an individual serial number by which date of manufacture, model type etc... can be identified.

It is important that this serial number is included in any request for spares items.

The serial number may be found on a data plate, as shown below. It will be mounted on the left internal wall, above the top shelf.

(Cornelli	Name Of Unit
SERIAL No.	12345678
MODEL No.	24 1
CE	BAR CODE
REFRIGERANT VOLTS MAINS FUSE	QTY CYCLES WATTS

RETAIL CABINETS

IMI CORNELIUS UK LTD
RAWSON SPRING WAY
RIVERDALE INDUSTRIAL ESTATE
SHEFFIELD
S6 1PG
TEL 0114 2852245

TEL... 0114 2852345 FAX... 0114 2320067 e-mail... sheffieldr@corneliusUK.com



RDM Controller Kit – ALL COMPONENTS SUPPLIED IN A KIT

4	High Temperature kit	Low temperature kit	Supply
9	37 0 7400070	37 0 7400071	Date
RDM Digital Display	Kit includes – Air probe 37 0 7400025,, PCB and Digital Display	Kit includes – Air probe 37 0 7400025, Defrost probe 37 0 7400026,	12/01 >
Kow Digital Display		PCB and Digital Display	

GP Controller Kit - ALL COMPONENTS SUPPLIED IN A KIT

OF CONTROLLS KIL - ALL COMI OF	NENTS SOFFEIED IN A KIT		
GP Digital Display	High Temperature kit	Low temperature kit	
	37 0 7400052	37 0 7400053	
₹	Kit includes – Air probe 37 0 7400025,, PCB and Digital Display	Kit includes – Air probe 37 0 7400025, Defrost probe 37 0 7400026,	06/99 to
		PCB and Digital Display	12/01



This is a GP style controller, it is held in place by two clips at the rear.



This is the new RDM controller, it is held in place with two screws at the rear.



This is the Pegasus style controller. Display PCB is held in place by four pins that are welded to the stainless steel control panel.

The Display PCB is protected by a grey adhesive membrane (label) which has a window for the temperature display.

FROM	PART NUMBER AND DESCRIPTION		NOTES	OUR REF. NUMBER
ELM	191261-LT HONEYWELL/ELM GP LOW TEMP CONT	ROLLER	PRE 2002	37 0 7400053
ELM	191260-HT HONEYWELL/ELM GP HIGH TEMP CONT	TROLLER	PRE2002	37 0 7400052
ELM	190937 HIGH TEMP PEGASUS CONTROLLER (PCB)		PRE 2002	37 0 7400028
ELM	190937 LOW TEMP PEGASUS CONTROLLER (PCB)		PRE 2002	37 0 7400029
ELM	BLACK BOX DISPLAY USED FOR PEGASUS		PRE 1994	37 0 7400024
ELM	190966 PEGASUS DISPLAY PRINTED CIRCUIT STRI	P	PRE 2002	37 0 7400030
ELM	BLACK PROBE			37 0 7400025
ELM	RED PROBE			37 0 7400026
	GREY TEMPERATURE PLAQUE -18/-22 (used	with Pegasus display1994-2001)	PRE2002	37 0 7700030
	GREY TEMPERATURE PLAQUE +1/+5 (used	with Pegasus display 1994-2001)	PRE 2002	37 0 7700029
	GREY TEMPERATURE PLAQUE CHILL -2/0 (used	with Pegasus display 1994-2001)	PRE2002	37 0 7700031
	GREY TEMPERATURE PLAQUE MEAT +2/0 (used	with Pegasus display 1994-2001)	PRE 2002	37 0 7700032
	OLD BLUE PLAQUE -18/122		PRE 1994	37 0 7700103
	OLD BLUE PLAQUE + 1/4		PRE 1994	37 0 7700110
	OLD BLUE PLAQUE BLANK		PRE 1994	37 0 7700105
	OLD BLUE PLAQUE CHILL +2 /0		PRE 1994	37 0 7700104
	OLD BLUE PLAQUE MEAT -2/0		PRE 1994	37 0 7700101
RDM	DIN CONTROLLER LOW TEMP		NOW	37 0 7400071
RDM	DIN CONTROLLER HIGH TEMP		NOW	37 0 7400070
	TP002KR DEFROST PROBE		NOW	37 0 7400026
	TP002K AMBIENT PROBE		NOW	37 0 7400025
	(NOTE THE PROBE'S ARE INTERCHANGEABLE V	/ITH		
	EACH CONTROLLER AND HAVE THE SAME PART	No.)		



Pegasus Digital Display	High and low temperature	membrane	membrane	membrane	membrane	04/94 to
(FBB) 1	digital display 37 0 7400030	37 0 7700030	37 0 7700029	37 0 7700031	37 0 7700032	12/01
PCB	Low temperature PCB 37 0 7400029					Pre 2002
PCB	High temperature PCB 37 0 7400028					Pre 2002
Air Probe (black)	Air Probe 37 0 7400025					
Defrost Probe (red)	Defrost Probe 37 0 7400026					
OLD Pegasus Controller - ALI	L COMPONENTS SUPPLIED INDIVIDUALLY					
Digital Display	High and low temperature digital display 37 0 7400024	Plaque 37 0 7700103	Plaque 37 0 7700101	Plaque 37 0 7700110	Plaque 37 0 7700104	Pre 1994
РСВ	Low temperature PCB 37 0 7400029					Pre 2002
РСВ	High temperature PCB 37 0 7400028					Pre 2002
Air Probe	Air Probe 37 0 7400025					
Defrost Probe	Defrost Probe 37 0 7400026					



Installation Guide (HT & LT models)

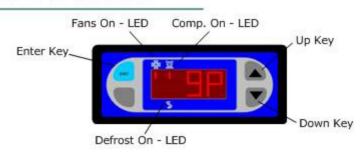
HT and LT GP Controllers comprise of a DIN size Front Panel Controller, a Combined relay/PSU module and Temperature Probe(s). HT has 1 probe, LT has 2 probes. GP Controller main features are: -

- Celsius or Fahrenheit temperature display
- Single stage thermostat using on/off relay
- Probe 1: Air probe (With alarm)
- Probe 2: Evaporator or air probe (With alarm)
 Programmable parameters
 Defrost scheduler (up to 24/day)
 Manual defrost (from the display buttons)

- 10A Fan control relay on LT model
- High volume Alarm buzzer
- Plant Fault digital input (0V return) 10A Defrost relay on LT model

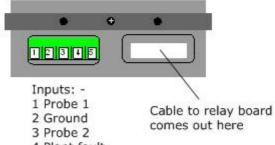
Mounting Instructions

- 1. Remove cable protector from the controller locating pins.
- 2. Remove the screw and detach the fixing bracket.
- Fit the controller, with the gasket in a suitable DIN size hole. (71mm x 29mm)
- 4. Locate the fixing bracket in the slots, then slide to engage the
- 5. Insert the screw then tighten until the fixing bracket secures the controller.
- 6. Attach the probe(s) and plant fault wiring (This can be done before operation 1.)
- 7. Fix the cable protector by locating the pins and gently pushing until secure.
- 8. Fix the Relay/PSU module in an appropriate position using the slots provided.
- 9. Remove the cover and plug in the controller (use the knock-outs provided)



Front View

Rear View

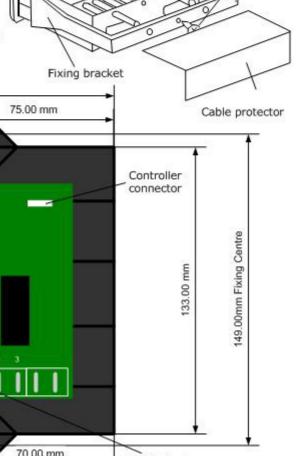


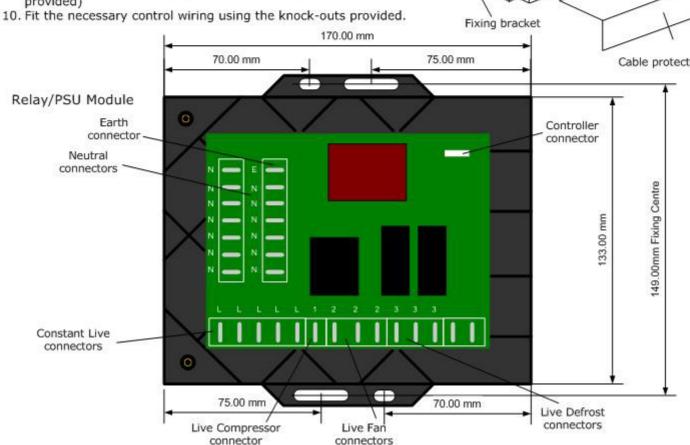
Locating pins

Fixing bracket screw

- 4 Plant fault
- 5 Ground

Gasket

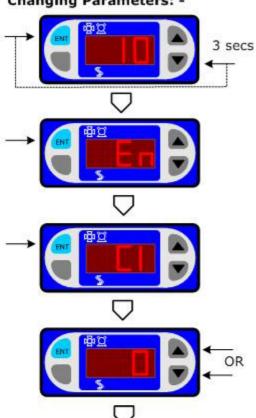




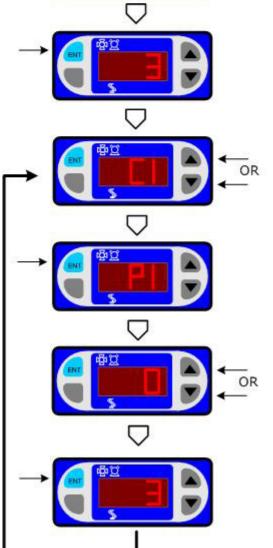


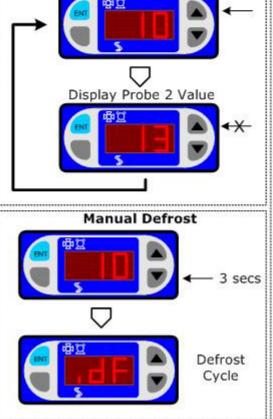


Changing Parameters: -



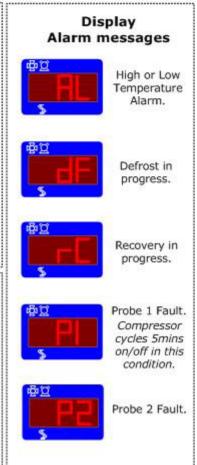
Parameter	Display	Min	Max	Default
Temperature Set Point	C1	Variable	Variable	0°C
Temperature Units	TU	С	F	С
Temperature Differential	P1	0°C	10°C	3°C
Probe 1 Offset	P2	-10°C	10°C	0°C
Set Point maximum	P3	-63°C	31°C	5°C
Set Point minimum	P4	-63°C	31°C	-5°C
Compressor Rest Time	P5	0 Mins	20 Mins	0
Probe 2 mode	P6	0=not used	1=Evap 2=Air	0
Probe weighting	P7	0	99	99
Defrost Type	d1	0	0=Electric 1=Gas 2=Off Cycle	0
Defrosts per Day	d2	0	24	4
Termination Time	d3	0 mins	60 mins	15 mins
Recovery Time	d4	0 mins	30 mins	15 mins
Termination Temp.	d5	0°C	31°C	20°C
Drain Down Time	d6	0 mins	10 mins	1 min
Fan Delay Time	d7	0 mins	15 mins	5 mins
Fan Delay Term Temp	d8	-20°C	20°C	0°C
Alarm Duration	A1	0 mins	61 mins	5 mins
High temp Alarm Offset	A2	0°C	31°C	10°C
Low temp Alarm Offset	A3	0°C	31°C	10°C
Alarm delay	A4	0 mins	60 mins	2 mins
Finish Setup	Fn	1		ĵ.





Normal Operation

Display Probe 1 value



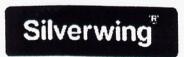
GP	or RDM	Controller PAI	RAMETERS	<u> </u>	
Parameter	Display	Min.	Max.	Low	High
Set-point				$-5^{0}\text{C}/-2^{0}\text{C}$	$+5^{0}\text{C}/+8^{0}\text{C}$
Temperature set-point	C1	Set-point Deg.	.0C	-5	5
Operating parameters					
Temp.differential	P1	0 Deg. ⁰ C	7 Deg. ⁰ C	3	3
Probe offset	P2	-10 Deg. ⁰ C	7 Deg. C	0	0
Set point maximum	P3	-63 Deg. ⁰ C -63 Deg. ⁰ C	31 Deg. OC 31Deg. OC	-1	9
Set point minimum	P4	-63 Deg. ⁰ C	31Deg. ⁰ C	-6	4
Comp. rest time	P5	0 minutes	20 minutes	2	2
Defrost parameters					
Defrost per day	D1	0	24	4	4
Termination temp.	D2	0 Deg. ⁰ C	31 minutes	15	15
Termination time.	D3	0 minutes	31 minutes	20	20
Defrost type: 0=Elect;1=Gas	D4	0	1	0	0
Drain Down time	D5	0 minutes	7 minutes	1	1
Fan Delay Time	D6	0 minutes	15 minutes	5	5
Recovery time	D7	0 minutes	15 minutes	10	10
Fan Delay term.temp.	D8	-20 Deg. ⁰ C	0 Deg. ⁰ C	-1	-1
Alarm parameters					
Alarm duration	A1	0 minutes	61 minutes	15	15
		0= buzzer	muted		
		61=buzzer	continuous		
High temp.alarm offset	A2	-63 Deg. ⁰ C	0 Deg. ⁰ C	10	10
Low temp.alarm offset	A3	-63 Deg. ⁰ C	0 Deg. ⁰ C	10	10
Alarm delay	A4	0 minutes	60 minutes	30	30

SET UP INSTRUCTIONS using a low temp board as a high

Parameter	Display	Min.	Max.	Freezer
Set-point				+1°c/+4°c
Temperature set-point	C1	Set-point Deg.	. ⁰ C	1
Operating parameters				
Temp.differential	P1	0 Deg. ⁰ C	7 Deg. ⁰ C	3
Probe offset	P2	-10 Deg. ⁰ C	7 Deg. ⁰ C	0
Set point maximum	P3	-63 Deg. ⁰ C	31 Deg. ⁰ C	5
Set point minimum	P4	-63 Deg. ⁰ C	31Deg. ⁰ C	1
Comp. rest time	P5	0 minutes	20 minutes	2
Defrost parameters				
Defrost per day	D1	0	24	4
Termination temp.	D2	0 Deg. ⁰ C	31 minutes	15
Termination time.	D3	0 minutes	31 minutes	15
Defrost type: 0=Elect;1=Gas	D4	0	1	0
Drain Down time	D5	0 minutes	7 minutes	2
Fan Delay Time	D6	0 minutes	15 minutes	0
Recovery time	D7	0 minutes	15 minutes	10
Fan Delay term.temp.	D8	-20 Deg. ⁰ C	0 Deg. ⁰ C	-1
Alarm parameters				
Alarm duration	A1	0 minutes	61 minutes	15
		0= buzzer	muted	
_		61=buzzer	continuous	
High temp.alarm offset	A2	-63 Deg. ⁰ C	0 Deg. ⁰ C	10
Low temp.alarm offset	A3	-63 Deg. ⁰ C	0 Deg. ⁰ C	10
Alarm delay	A4	0 minutes	60 minutes	30

- Disconnect defrost solenoid and drip tray heater (on printed circuit board terminals 3).
 Remove evap fan live from terminal 2 and put on to L terminal.
- 3. Disconnect door heater from L terminal.





SILVERWING ELECTRONIC CONTROLLER

OFF CYCLE DEFROST MODEL (HIGH TEMP-FRIDGE) FOR USE WITH PEGASUS BOARD

OVERVIEW

The controller is designed to switch the refrigeration system on until the cabinet temperature falls 3°C below a preset value. Four bit switches mounted on the board determine defrost frequency (diagram 1)

The display normally shows the cabinet temperature but under certain circumstances can show the following:

- 1) dF= cabinet in defrost mode.
- 2) Flashing between dF and cabinet temperature = recovering from defrost
- Flashing between Al and cabinet temperature = cabinet is a high temperature alarm.
- 4) Flashing between pF and +40 = probe 1 has failed.

DEFROST SETTINGS

The controller initiates defrosts at set intervals determined by the bit switch settings (diagram1)

A defrost signaled by the display showing dF, after defrost the display will alternate between dF and cabinet temperature this shows the unit is recovering from defrost the bit switches will be set up as diag 1

The compressor is switched off every 4hours for a pre set time (adjustable via RV4 see settings on table A). The compressor is held off for a 2-minute drip down after defrosts and the evaporator fans run continuously.

A manual defrost can be initiated by pressing the manual defrost button (if fitted) for 5 seconds or short out AUX on the board (see diagram 1). A manual defrost resets the <u>auto</u> defrost timer.

ALARM SETTINGS

The display reads AI if the cabinet temperature exceeds $+10^{0}$ C for 30 minutes, the display alternates between AL and cabinet temperature, the temperature falls 3^{0} C below $+10^{0}$ C the display will continue to show alarm until it is cleared at the next defrost.

SETTING MODE

Depressing SW2 button will activates setting mode. On holding down the button, CH4 will be displayed. On releasing the button, the set point value will be displayed. Adjustment of potentiometer RV4 will change this value. The display will automatically revert to normal after a period of 30 seconds.

Note: CH4 only can be adjusted - other parameters are pre-set within the controller and cannot be modified.

PROBES

P1 is the air probe.

If PI fails the display will show pf1 and the compressor will cycle 10 minutes on then 10 minutes off to maintain a refrigerated state within the cabinet. If P2 fails the unit will default to maximum defrost time.

POWER UP

Upon power up there is a 2-minute delay before the compressor starts, this can be overridden by depressing SW2. There is a minimum off time minutes during normal operation, which is non adjustable.

TABLE A

CHANNEL ID	READING	POT	VALUE
	CUT IN TEMP(°C)		4
	ALARM SET POINT(°C)		10
CH4	MAX DEFROST TIME	RV4	25
BIT SWITCH	SETTING		DIAG 1

BIT SWITCH SETTING

DIAGRAM 1

	SW1	SW2	SW3	SW4
		O.N	ON	
0000	OFF			OFF





SILVERWING ELECTRONIC CONTROLLER

ASSISTED DEFROST MODEL (LOW TEMP-FREEZER) FOR USE WITH PEGASUS BOAR)
OVERVIEW 370 7400029

The controller is designed to switch the refrigeration system on until the cabinet temperature falls 3°C below a preset value. Four bit switches mounted on the board determine defrost frequency (diagram 1)

The display normally shows the cabinet temperature but under certain circumstances can show the following:

1) dF= cabinet in defrost mode.

2) Flashing between dF and cabenet temperature = recovering from defrost

3) Flashing between Al and cabinet temperature = cabinet is a high temperature alarm.

4) Flashing between pF and +40 =probe 1 has failed.

DEFROST SETTINGS

The controller initiates defrosts at set intervals determined by the bit switch settings (diagram1)

A defrost signaled by the display showing dF, after defrost the display will alternate between dF and cabinet temperature this shows the unit is recovering from defrost the bit switches will be set up as dia 1A or 1B

<u>Diag 1</u> is for electric defrost, in this setting the compressor is switched off 4 times per day for a pre set time (adjustable via RV4 see settings on table A) or until the pre-set termination temperature is reached (adjustable via RV3), whichever is the sooner. The compressor is held off for a 2 minute drip down after defrosts and the evaporator fans are held off for a further 5 minutes.

Diag 1B is for hot gas defrost, in this setting the compressor and the hot gas solenoid valve are energised 6 times per day, the evaporater fans and terminations are as above.

A manual defrost can be initiated by pressing the manual defrost button (if fitted) for 5 secs or short out AUX on the board (see diagram 1). A manual defrost resets the <u>auto</u> defrost timer.

ALARM SETTINGS

The display reads AI if the cabinet temperature exceeds the Ch2 value for 30 minutes, the display alternates between AL and cabinet temperature, the temperature falls 3° C below the Ch2 value the display will continue to show alarm until it is cleared at the next defrost.

SETTING MODE

Depressing SW2 activates setting mode. Holding down the button will display P1 upon releasing the button probe 1 value will be displayed. By repeating this process all the probe values and set points can be read. Adjustment of set point can be made by adjusting the relevant potentiometer when its value is displayed.

PROBES

P1 is the air probe, and P2 is the evaporator probe, P3 and P4 are not used.

If PI fails the display will show pf1 and the compressor will cycle 10 minutes on then 10 minutes off to maintain a refrigerated state within the cabinet. If P2 fails the unit will default to maximum defrost time.

POWER UP

Upon power up there is a 2-minute delay before the compressor starts, this can be overridden by depressing SW2. There is a minimum off time minutes during normal operation, which is non adjustable.

TABLE A

-			GAS	DEFROST	HEATER	DEFROST	
CHANNEL ID	READING	POT	Н	L	С	M	L
CH1	CUT IN TEMP(°C)	RV1	5	-18	3	1	-18
CH2	ALARM SET POINT(0C)	RV2	10	00	10	10	0
CH3	DEF TERMINATION(°C)	RV3	15	15	10	10	10
CH4	MAX DEFROST TIME	RV4	15	15	20	20	20
BIT SWITCH	SETTING		DIAG	1B	DIAG	1	

BIT SWITCH SETTING

DIAGRAM 1

SW1	SW2	SW3	SW4
ON		ON	ON
	OFF		

DIAGRAM 1B
SW1 SW2 SW3 SW4
ON ON ON OFF



Pegasus Break Down

ANALYSIS OF DISPLAY:

DISPLAY DEFINITION POSSIBLE SOLUTION

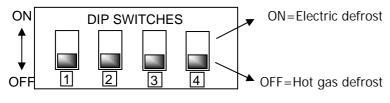
dF	System is in defrost	N/A
ui	mode	IN/A
Flashing between dF	System is recovering	N/A
& temperature	from defrost mode	IN/A
Flashing between Al &	Cabinet temp is too	Clean condenser &
temperature	warm	check settings
Flashing between pF1	Probe 1 is faulty, comp wil run	 Replace faulty probe
& temperature	in 10 minute cycles.	Replace faulty probe

MANUAL DEFROST:

Manual defrost can be achieved by pressing & holding the defrost button on the temp display for 6 seconds. Alternatively short out the 2 auxillary terminals on the PCB.

AUTOMATIC DEFROST:

The amount of defrosts per day is determined by dip switches 1 & 2 on the PCB. Dip switch no.3 should always be in the 'OFF' position. Switch no. 4 selects hot gas defrost or electric defrost.



Defrost Frequency	Bit Switch 1	Bit Switch 2
3 Per Day	OFF	OFF
4 Per Day	ON	OFF
6 Per Day	OFF	ON
8 Per Day	ON	ON

Press 'SW2' X 4	Ch-1	Using flat blade screwdriver adjust RV1 to set Ch1	Running temperature setting.
Press 'SW2' X 1	Ch-2	Using flat blade screwdriver adjust RV2 to set Ch2	



COUNTERS

COUNTERS						
	Temp Range "C"	Capillary	Condenser	Compressor	Gas	Charge
W5H	+1/+4	96" x 0.042"	STFT14	BP1058Z	R124a	180g
W5L	-18/-22	117" x 0.042"	STVF100	SC15BX	R408a	215g
W5M	0/-2	96" x 0.042"	STFT14	BP1058Z	R124a	180g
SL150H	+1/+4	96" x 0.042"	STFT14	BP1058Z	R124a	180g
SL150L	-18/-22	117" x 0.042"	STVF100	SC15BX	R408a	215g
SL150M	0/-2	96" x 0.042"	STFT14	BP1058Z	R124a	180g
S140H	+1/+4	96" x 0.042"	STVF67	BP1058Z	R124a	260g
S140L	-18/-22	117" x 0.038"	STVF100	MP90FB	R404a	270g
S140M	0/-2	96" x 0.042"	STVF67	BP1058Z	R124a	260g
S140H BOROGLASS	+1/+4	96" x 0.042"	STVF67	THB4413Y	R124a	260g
WS1 SS1H	+1/+4	96" x 0.042"	STFT14	3.6CC	R124a	180g
WS1 SS1L	-18/-22	117" x 0.038"	STVF100	SC15BX	R408a	215g
SS1 MC FLURRY	-18/-22	117" x 0.038"	STVF100	ML90FB	R404a	270g
WS2 SS2H	+1/+4	96" x 0.042"	STFT14	AEZ4425Y	R134a	265g
WS2 SS2L	-18/-22	117" x 0.038"	STVF100	SC15BX	R408a	215g
MD2	+1/+4	96" x 0.042"	STVF100	AEZ4430Y	R134a	370g
MD3	+1/+4	96" x 0.042"	STVF100	CAE4440Y	R134a	450g
404 400 400 11	4/ 4	0/" 0.040"	OTVE / 7	A E 7 4 40 E V	D404	005
1D1 1D2 1D3 H	+1/+4	96" x 0.042"	STVF67	AEZ4425Y	R134a	285g
1D1 1D2 1D3 M	0/-2	96" x 0.042"	STVF67	AEZ4425Y	R134a	285g
1D1 1D2 1D3 L	-18/-22	117" x 0.038"	STVF100	SC15BX	R408a	270g
1D2H PT	+1/+4	96" x 0.042"	STVF100	AEZ4430Y	R134a	370g
1D3H PT	+1/+4	96" x 0.042"	STVF100	CAE4440Y	R134a	450g
1D4H	+1/+4	96" x 0.042"	STVF100	CAE4440Y	R134a	425g
1D4M	+1/+4	96" x 0.042"	STVF100	CAE4440Y CAJ2428L	R134a	425g
1D4L	-18/-22	117" x 0.038"	STVF100	CAJ2420L	R408a	355g
2D1H	+1/+4	96" x 0.042"	STVF93	AEZ4430Y	R134a	330g
2D1M	0/-2	96" x 0.042"	STVF93	AEZ4430Y	R134a	330g
2D1W	-18/-22	117" x 0.038"	STVF100	SC15BX	R408a	270g
2D2H	+1/+4	96" x 0.042"	STVF100	AEZ4430Y	R134a	330g
2D1M	0/-2	96" x 0.042"	STVF100	AEZ4430Y	R134a	330g
2D1L	-18/-22	117" x 0.038"	STVF100	SC15BX	R408a	255g
2D2H	+1/+4	96" x 0.042"	STVF100	CAE4440YY	R134a	425g
2D1M	0/-2	96" x 0.042"	STVF100	CAE4440YY	R134a	425g
2D1L	-18/-22	117" x 0.038"	STVF100	CAJ2428L	R408a	355g
2D1SP/SPB			STVF93	Aez4430y	R134a	1000G
2D2SP/SPB			STVF100	CAE4440Y	R134a	1000g
2D3SP/SPB			STVF194	SC21G	R134a	1000g
RT6	5	144" X 0.038"	STVF47	THB1335Y	R134a	150g
RT10 / RT12	5	96" X 0.042"	STVF67	AEZ4425Y	R134a	285g



COUNTER TOP SPECS

	Temp Range "C"	e Capillary	Condenser	Compressor	Gas	Charge
S45H	+1/+4	4M X 0.031"	STVF10	B6132H	R134a	110g
S45L	-18/-22	7M X 0.026"	STVF10	ML60FB	R134a	200g



TALL UPRIGHT CABINETS

TALL UPRIGH						
	Temp Range "C"	Capillary	Condenser	Compressor	Gas	Charge
AMBASSADOR	+2/+6	3.3M X 0.052"	STVF139	SC15G	R134A	450g
W/4 / D / FOLL	1/ 4	0/" \/ 0 040"	CTV (FO2	A E 7 4 4 2 0 V	D104-	220
W16 B450H	+1/+4	96" X 0.042"	STVF93	AEZ4430Y	R134a	330g
W16 B450M	0/-2	96" X 0.042"	STVF93	AEZ4430Y	R134a	330g
W16 B450L	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	270g
W16 B450HL	+1/+4	96" X 0.042"	STVF67	AEZ4425Y	R134a	285g
	-18/-22	117" X 0.042"	STVF67	SC15BX	R408a	230g
W21 B600H	+1/+4	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
W21 B600M	0/-2	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
W21 B600L	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	340g
	-18/-22	117" X 0.042"	STVF139	MP14FB	R404a	400g
						Ü
B900H	+1/+4	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
B900M	0/-2	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
B900I	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	335g
B1300H	+1/+4	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
B1300M	0/-2	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
B1300lVi	-18/-22	180" X 0.042	STVF100	SC21BX	R408	560g
BISOOL	-10/-22	180 X 0.032	3111174	302 IBX	K400	500g
T450H	+1/+4	96" X 0.042"	STVF93	AEZ4430Y	R134a	330g
T450M	0/-2	96" X 0.042"	STVF93	AEZ4430Y	R134a	330g
T450L	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	270g
T600H	+1/+4	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
T600M	0/-2	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
T600I	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	340g
10001	-18/-22	117" X 0.042"	STVF139	MP14FB	R404a	400g
	10/ 22	117 X 0.012	3111107	WII T II B	Kioia	1009
T900H	+1/+4	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
T900M	0/-2	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
T900I	-18/-22	117" X 0.042"	STVF100	SC15BX	R408a	335g
T1200U	. 1/. 1	96" X 0.042"	STVF100	CAEAAAOV	D1246	12Fa
T1300H	+1/+4	96" X 0.042"	STVF100 STVF100	CAE4440Y	R134a	425g
T1300M T1300L	-18/-22	180" X 0.042"	STVF100 STVF194	CAE4440Y SC21BX	R134a R408	425g
TISUUL	-10/-22	100 A 0.032	31 VI 174	JUZ IDA	11400	560g
G22H	+1/+4	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
00014	0/-2	96" X 0.042"	STVF100	AEZ4430Y	R134a	370g
G22M						
G22IVI G22L	-18/-22	102" X 0.042"	STVF100	CAJ2428L	R408a	330g
		102" X 0.042" 96" X 0.042"	STVF100 STVF67	CAJ2428L AEZ4425Y	R408a R134a	330g 330g

G48H	+1/+4	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
G48M	0/-2	96" X 0.042"	STVF100	CAE4440Y	R134a	425g
G48L	-18/-22	180" X 0.052"	STVF194	CAJ2446L	R408a	520g



ASDA PRODUCTS – CARTS ETC

	Temp Range "C"	Capillary	Condenser	Compressor	Gas	Charge
AS0100	+1/+4	96" x 0.042"	STVF100	ML80TFB	R404a	400g
AS0200	+1/+4	96" x 0.042""	STVF100	ML80TFB	R404a	400g
AS0400	+1/+4	96" x 0.042"	STVF100	ML80TFB	R404a	400g
AS0300	+1/+4	96" x 0.042"	STFT14	BP1058Z	R404a	180g
AS0500	+1/+4	117" x 0.042"	STVF100			
	0/+2	96" x 0.042"	STFT14	BP1058Z	R404a	180g
AS0800	0/-4	NA	STVF139	MP12FB	R404a	1500g
AS0900	0/-4	NA	STVF139	MP90FB	R404a	1500g
Multideck 1000	+1/+4	NA	NA	CAJ4482YHR	R134a	1000g

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